

May 4, 2007

By Hand Delivery And Email

Ms. Monica Harvey
Virginia Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23219



Re: Comments on Draft Consent Order Between the Virginia Department of Environmental Quality and the Mirant Potomac River Generating Station and Draft Order Proposed by the City of Alexandria

Dear Ms. Harvey:

Mirant Potomac River, LLC ("Mirant") is pleased to provide comments on (1) a draft consent order negotiated between the Virginia Department of Environmental Quality ("DEQ") and Mirant (the "DEQ Consent Order") and (2) a draft order proposed by the City of Alexandria ("City Proposed Order") relating to the Mirant Potomac Generating Station ("PRGS") located in Alexandria, Virginia. These comments include (i) a summary, (ii) a table comparing the DEQ Consent Order the City Proposed Order, (iii) background on how the issues arose, (iv) a discussion of the purpose and goals of the DEQ Consent Order, (v) comments specific to the DEQ Consent Order and (vi) comments specific to the City Proposed Order.

I. Summary of Comments

Mirant has dual obligations. It must meet its environmental obligations, including ensuring that its operations protect the National Ambient Air Quality Standards ("NAAQS"). Mirant has been working cooperatively with both the DEQ and United States Environmental Protection Agency ("EPA") to promote long-term achievement of the NAAQS. At the same time, Mirant must provide reliable electricity to the citizens of the greater Washington, D.C. area.¹ The facility plays a critical role in meeting the high and growing demand for electricity in

¹ Fully satisfying both obligations requires a balancing of interests. The need to balance these competing interests was recognized by Congress when it enacted the Clean Air Act, which provides that "economic growth will occur in a manner consistent with the preservation of existing clean air resources." 42 U.S.C. Section 7470(3) (relating to the Prevention of Significant Deterioration ("PSD") review process). As the D.C. Circuit Court observed shortly

the central Washington, D.C. metropolitan area including the White House and numerous other federal and D.C. agencies. To meet both these obligations, Mirant and any order it operates under must strike a delicate balance.

Mirant supports DEQ's issuance of the DEQ Consent Order. It protects the NAAQS, provides a long-term game plan for ensuring continued NAAQS protection, helps to ensure that a stable, reliable energy source is available for the Washington, D.C. area, provides additional resource adequacy to the region, which is getting increasingly short on energy resources, and appropriately addresses the concerns raised by the City of Alexandria and some of its citizens. The DEQ Consent Order, which incorporates many of the measures requested by the City of Alexandria, is the best option for protecting local and regional air quality concerns while at the same time ensuring a stable and reliable energy supply for the area. Moreover, it is the only lawful Consent Order presented for comment.

The City Proposed Order is not a "consent order" since neither DEQ nor Mirant has agreed to it. Thus, it could not be legally entered. Moreover, the City Proposed Order strikes an improper balance: it is unnecessarily over-protective of the NAAQS and jeopardizes reliable electrical service. In contrast to the DEQ Consent Order, the City Proposed Order's provisions will not lead to the establishment of an effective long term solution to air pollution concerns in the area; it provides only a stop-gap solution. Despite (or perhaps because of) recent losses by the City in litigation before the Supreme Court of Virginia aimed at zoning PRGS out of existence, the City Proposed Order is motivated by a desire to address land use concerns by forcing Mirant to shut down. This is evident from the overly restrictive and technically infeasible proposed emission limitations and certain provisions that read more like litigation discovery requests than a consent order. Such provisions or motivations have no place in air quality management and place the health and welfare of citizens of Washington, D.C. at risk by jeopardizing their electricity. The City Proposed Order reflects this continued intent to pursue litigation and the continued attempts by the City to raise the standards with which Mirant must comply while simultaneously placing obstacles in Mirant's path to achieving them. The City Proposed Order should be rejected.

II. Summary of the DEQ Consent Order and Comparison to the City's Proposed Order

Provision	DEQ Consent Order	City Proposed Order
Requires trona injection	Provision requiring trona injection- (D.1)	Provisions relating to trona injection
SO ₂ limit	includes SO ₂ limitations (0.55 lbs/MMBTU	0.40 lb/MMBTU SO ₂ calendar day

after the PSD provisions were enacted in 1977, the program reflects a "balance" between Congress' "determination to preserve the clean air regions of the Nation" and "other vital economic and energy considerations." *Alabama Power Co. v. Costle*, 636 F.2d 323, 387 (D.C. Cir. 1979).

Provision	DEQ Consent Order	City Proposed Order
	on a 24 hr avg; 0.50 on a 30 day rolling average)	average 0.35 lb/MMBtu 30-day rolling average (D.7)
Control technology evaluation	Requires control technology evaluation for criteria pollutants (to be used in developing permit) (D.2)	Not included
Model evaluation Study	Requires continuation of model evaluation study (D.3)	Not included
Predictive Modeling	Requires implementation of operational controls based on predictive modeling (D.4-7)	Does not allow use of predictive modeling on forecasted air quality action days. For those days, the facility must shut down (D.3)
PM 10	Requires control of PM10 emissions based on predictive modeling (D.8) sets maximum of 0.055 lbs/MMBTu for PM ₁₀ on 3 hour average basis	0.055 lb/MMBTu PM ₁₀ (D.17-19) Imposes more stringent limitations for SO ₂ and PM10; fugitive emissions are incorporated into measurement of PM10 emissions (D.6-7)
Stack Merge	Provisions requiring installation of stack merge project to reduce downwash (D 12-21)	Not included
Reporting requirements	Bi-weekly reports to DEQ and EPA (D.23)	In addition to bi-weekly reports, weekly report of all data generated by monitors. City is to receive all reports directly (as if a regulatory agency). Additional detailed report of emissions data from 2003-2006 due 15 days after entry of order. (D.11-13)
Operation during a line outage	During line outage situations, follow DOE Order and best air pollution control practices in Appendix 2, continue predictive modeling, continue operation of trona injection system, and follow monitor alert system requirements. (D.24-25)	Retains emission limitations for operation during line outages. (D.14-16) which are inconsistent with reliable electrical supply.
Annual emission limitations	Sets annual emission limits for NO _x , Emission limitations: No more than 3700 tons NO _x /year No more than 1600 tons NO _x between May 1 - September 30	Sets Emission Limitations: on NO _x 3700 tons NO _x /year 1019 tons NO _x between May 1 through September 30

Provision	DEQ Consent Order	City Proposed Order
	After Stack Merge Project, imposes annual limitations on :SO ₂ , CO, VOC, PM, PM ₁₀ , PM _{2.5} . (D.26-28)	

III. Background

A. The Mirant Potomac Generating Station

The Mirant facility was originally constructed in 1949. At that time, as a result of the facility's proximity to the National Airport (now the Ronald Reagan National Airport), the facility's five stacks were constructed to be 163 feet above ground level (197 feet above mean sea level). As a result of these shorter stacks, windy conditions can result in downwash — emissions are forced to ground level rather than rising.

Since the time the facility was constructed, the City of Alexandria has allowed and continues to allow development in that area, and the facility is now surrounded by residential and commercial properties. High-rise condominium developments have been constructed that now look down on the plant and the plant's stacks. As a consequence of this development, Mirant must also operate constrained by limited space and access to transportation.

The City has also limited the options available to Mirant to address the concerns of neighboring citizens. For example, raising the height of the stacks by 50 feet would offer significant protection to the citizens of Alexandria by solving the down wash problem. (*See* Attachment 1.) The FAA has approved raising the height of the stacks by 50 feet. (Attachment 2.) Nevertheless the City has opposed that stack height increase and has hired consultants to battle it. The FAA has rejected the City's request to reopen the issue (Attachment 3).

B. Procedural History

Mirant has owned and operated the equipment at PRGS since 2000. In 2003, DEQ issued a notice of violation ("NOV") against Mirant for allegedly exceeding the PRGS's allocation of allowances for NO_x emissions. The enforceability of the allowance was in dispute since it purportedly allowed no allowance trading. Mirant, US EPA, Maryland and Virginia negotiated and executed a Consent Decree in 2005 to settle the alleged violations and provide for significant reduction of NO_x emissions from the Mirant plants in the Greater Washington, D.C. nonattainment area. Attachment 4. Mirant promptly took steps to comply with that Consent Decree. (The Decree was finally entered by the D.C. Circuit Court on April 27, 2007.) Since 2003, Mirant has not exceeded any of its applicable limitations.

As a result of the 2003 permit exceedance, Mirant agreed to conduct a study of PRGS's emissions. In August 2005, modeling results were submitted to DEQ that suggested the PRGS SO₂ emissions contributed to modeled NAAQS exceedances. Mirant curtailed its operations by approximately 65%. On August 23, 2005, Mirant decided to shut down PRGS because it could

not come up with a short-term solution to the emissions that were contributing to a modeled NAAQS exceedance.

PRGS was required to restart its operations by the Federal Energy Regulatory Commission because its shutdown caused grid reliability issues for the power supply to the White House, Congress, and other sites of national importance. Accordingly, Mirant resumed partial operation on September 21, 2005. On December 20, 2005, the United States Department of Energy ("DOE") also issued an order directing Mirant to submit an operating plan to assure both electric system reliability and emission levels protective of the NAAQS. Mirant submitted that plan on December 30, 2005 and DOE issued a Supplemental Order on January 4, 2006 directing Mirant to comply with that plan. PJM and PEPCO both filed comments with DOE stating that Mirant's operations under the plan would not provide the necessary reliability to the D.C. area. Accordingly, Mirant, EPA and DOE set forth to establish a plan that would protect the environment and the NAAQS, but still provide the necessary reliability of energy to the D. C. area.

EPA and Mirant entered into an Administrative Order by Consent ("ACO") in June 2006 (Attachment 5) to address further Mirant's emission levels and to develop emissions limits for the facility that protect the NAAQS. The ACO directs Mirant to comply with the DOE Order. The ACO expires on June 1, 2007. The ACO established two distinct operating scenarios under which Mirant operates: (1) line outage situations in which Mirant must follow load demand as required by the DOE Order, and (2) non-line outage situations in which Mirant uses predictive modeling to determine how much electricity it can bid to produce and on which Mirant can back off load to protect the NAAQS.

The ACO requires Mirant to install and operate monitors located where predicted impacts are highest to ensure that its emissions do not cause or contribute to an exceedance of the NAAQS. These monitors are linked to alarms that alert Mirant if ambient concentrations measured by the monitors reach 80% of the 3 or 24 hour NAAQS. During non-line outage situations the alarms have never been activated. The results of the monitoring have indicated that, with the exception of one anomaly caused by weather conditions on February 23, 2007, during a line outage, the emission levels have been protective of the NAAQS. \

The ACO also requires predictive modeling to ensure Mirant's operating levels are protective of NAAQS. In this modeling, Mirant uses the predicted weather conditions as inputs to model ambient impacts. The modeling is used to determine the operating level Mirant can employ while still protecting the NAAQS with a margin of safety. Thus, the monitoring and predictive modeling provide a "belt and suspenders" for environmental protection. The DEQ Consent Order reflects the same approach.

On June 2, 2006, DOE modified its December 20, 2005 order requiring Mirant to run in accordance with the ACO. Although the ACO expires June 1, 2007, the DOE Order remains in effect until July 1, 2007, unless extended by DOE.

IV. Purpose of the Consent Order

As discussed above, Mirant has not violated any permit limitations nor have its emissions caused or contributed to NAAQS exceedances save for the one isolated instance in February 2007 that occurred during a line outage situation where despite predictive modeled exceedance and alarms, Mirant was required to run by the DOE Order and EPA ACO. Environmental protection is one of Mirant's top priorities. Mirant is willing to take necessary, reasonable and appropriate measures to control and minimize its emissions. It also must meet the requirements of the DOE Order and provide reliable electricity to Washington, D.C. These dual goals may clash during line outages when PRGS must "match load" essentially operating at full load as the primary if not the only supplier of electricity to the District, without the option of reducing load. Mirant is working to develop a plan that will allow it to meet its multiple obligations in a well-ordered and rational manner. Accordingly, Mirant is voluntarily working with DEQ, the State Air Pollution Control Board (the "Board") and the City of Alexandria to proactively address concerns and balance its dual obligations through the DEQ Consent Order before an emergency arises.

Despite the fact that the Board and the City of Alexandria have no legal authority to impose requirements in a consent order in this context, Mirant has nevertheless made great efforts to address the concerns raised by both parties. As University of Richmond Law School Dean Rod Smolla testified during the April 10, 2007 Board meeting, Mirant has been unable to completely satisfy the City of Alexandria for three primary reasons. See Transcript of April 10 Board Meeting at 91-98.²

First, Mirant views the DEQ Consent Order as one step on the way to a longer-term solution. The ultimate means of ensuring environmental protection is a consent order that protects the environment and enables Mirant to continue as an integral power source for D.C. Further data is needed to meet this goal. The DEQ Consent Order provides the time and means for gathering this data. The parties currently lack sufficient data to develop effective, achievable emission limitations for such a permit. The DEQ Consent Order requires: (1) preparation of a report by an independent engineering consultant on feasible, available and achievable treatment technologies for the reduction of SO₂, NO_x and PM emission; and (2) performance of predictive and "hindcast" computer modeling using actual weather conditions and operating parameters. These new requirements are coupled with the ongoing model evaluation study ("MES").³ Collectively, the data generated by these studies will lead to the development of effective long-term emission limitations in a state operating permit.

² By letter dated April 24, 2007 from Kevin Finto to Cindy Berndt (Attachment 8), Mirant filed the original transcripts of the March 26, 2007 and April 10, 2007 as part of the record in these proceedings and incorporates these transcripts in their entirety into these comments.

³ We note that EPA recently approved use of equivalent building dimensions ("EBD") as an alternative modeling method to the default assumptions in AERMOD. (See Attachment 9.)

The City of Alexandria, on the other hand, is more focused on the short-term, without concern for the long-term operation of the plant. In fact, the City of Alexandria's acknowledged long-term goal is to close the plant down. See Memorandum from Philip Sunderland, City Manager, to The Honorable Mayor and Members of City Council, dated May 10, 2004 (Attachment 6), Memorandum from Ignacio B. Pessoa, City Attorney, to the Honorable Mayor and Members of City Council, dated June 18, 2004 (Attachment 7), Judge's Ruling in *Mirant Potomac River, LLC, et al. v. The Alexandria City Counsel, et al.*, (Attachment 9), and Opinion by Justice Elizabeth B. Lacy, in *Alexandria City Counsel, et al. v. Mirant Potomac River, LLC, et al.* (Attachment 11). Memorandum dated June 18, 2004 from Schnader Harris Segal & Lewis LLP regarding Mirant Potomac River Power Plant Recommended Legal Actions Worth of Further Review (Attachment 12). Toward this goal, the City Proposed Order attempts to impose long-term overly restrictive limitations without proper data in the short-term and without allowing the necessary projects to achieve compliance with those limitations. The clear intent of the city during this process is to have the Board impose any order that will force the plant to shut down. This conflict between the long-term goals of the parties, as well as the parties' understanding of the purpose of the order, lead to irreconcilable differences between Mirant and the City of Alexandria's plans for the future.

Second, as noted above, Mirant is focused on balancing many different interests: protection of the environment, provision of a reliable power supply, compliance with the DOE Order, concerns of its neighbors, and economic and technical constraints. The City of Alexandria, on the other hand, is solely focused on its local, politically motivated goals, and is not willing to acknowledge the impact on any other interests.

Third, applicable law establishes the DEQ and the Board as regulators of Mirant as to how the plant operations can be controlled to minimize impacts to air quality. The City of Alexandria appears to view itself as a regulator, and accordingly expects Mirant to respond to all of its demands. This view is antagonistic to real negotiations and is reflected in many of the provisions in City Proposed Order. Mirant has incorporated many of the City of Alexandria's requests into the order it negotiated with DEQ, but cannot agree to allow the City of Alexandria to become an ultra vires regulator, especially given the City of Alexandria's acknowledged desire to shut down the plant.

In light of these differences, the DEQ Consent Order appropriately accommodates the City while enabling the development of a long-term permitting solution and proper balancing of Mirant's important obligations.

V. Comments Specific to the DEQ Consent Order

A. The DEQ Consent Order Protects of NAAQS and Public Health.

NAAQS were established for certain pollutants by EPA to set standards for air quality that are protective of human health with *an adequate margin of safety*. CAA 109(b)(1), 42

U.S.C. 7409(b)(1) (emphasis added). Thus, because the DEQ Consent Order protects the NAAQS, it protects public health. NAAQS apply to ambient air quality and are not directly enforceable against specific facilities. Thus, NAAQS exceedances resulting in a nonattainment area are caused by the cumulative emissions from a region (*e.g.*, the Greater Washington D.C. metropolitan area is nonattainment for ozone and PM_{2.5}, pollutants largely associated with automobile emissions. 40 C.F.R. Part G, Appendix W, Section 5.1. Under applicable air permit programs, DEQ sets emission limitations that ensure, among other things, that a facility's emission will not cause or contribute to an exceedance of a NAAQS. As explained above, that is the purpose of the DEQ Consent Order — to establish requirements and procedures that will apply while improvements are made to the plant and necessary data are collected that will enable the development of long-term permit limits that are protective of the NAAQS and allow for reliable electric service in the Washington D.C. area.

The DEQ Consent Order contains all of the features that protect air quality that are required by the EPA ACO currently in effect and some new measures. These include continued monitoring of SO₂ at six existing and four new continuous ambient monitors. The monitors include alarms that are triggered when ambient concentrations of SO₂ reach 80% of the NAAQS. Triggering the alarm also triggers requirements to reduce operations. EPA regulations, which are incorporated by reference into Virginia's regulations allow for the establishment of NAAQS protective emission limits for existing sources solely by the use of data from ambient monitors. 9 VAC 5- 20-21. E. *incorporating* 40 C.F.R. Part 51 Appendix W Section 10.2.2. Again, the DEQ Consent Order does not set permit limits but the regulations confirm that monitoring alone can be NAAQS protective.

In a similar manner, the DEQ Consent Order provides for monitoring of PM 2.5 from one existing and three new sites. A comparison of monitoring data from the PM 2.5 monitor near PRGS and other PM 2.5 monitors in the Northern Virginia area shows that the ambient levels are virtually indistinguishable indicating that the PM 2.5 is a regional issue and not the result of PRGS operations. (*See* Attachment 13.)

While monitoring can protect the NAAQS, the DEQ Consent Order requires more. It requires predictive modeling — each day, models are run using projected meteorological data and operating conditions for the next day to predict ambient concentrations. Mirant uses the predictive modeling to determine the level at which it can operate to determine how much electricity it can bid to provide PJM the following day. Modeling run since June 1, 2006 shows the predictive modeling is conservative; *i.e.*, it over predicts ambient concentrations. *See* Attachment 14 (chart showing that predicted model results are consistently lower than monitored results at locations predicted to have the highest impacts).⁴ EPA has allowed use predictive modeling in its ACO for the Mirant plant dated June 1, 2006 and similar circumstances to protect

⁴ These comments incorporate by reference all weekly reports modeling data since June 1, 2006 by David S. Cramer of Mirant submitted to DEQ which show the predictive modeling is protective of the NAAQS.

the NAAQS where traditional modeling in the context of setting permit limits does not fully account for actual circumstances. This practice is consistent with the approach outlined in 40 C.F.R. Part 51 Appendix W. Section 1.0.e, which provides that in all cases, the model applied to a given situation should be the one that provides the most accurate representation of atmospheric transport, dispersion and chemical transformations in the area of interest. Accordingly, EPA approved use of predicted modeling in its ACO of June 9, 2006. Similarly, the DEQ Consent Order provides for predictive monitoring of SO₂ and PM 10.

The DEQ Consent Order also provides for a better protection of human health by providing greater flexibility for the plant to operate in a manner that promotes electrical reliability while protecting the NAAQS. Mirant is one of three sources that provide electricity to Central D.C. area customers. If Mirant were not available to generate electricity, a potentially extended blackout could occur in the Central D.C. area. Special Environmental Analysis, U.S. Department of Energy, DOE/SEA-04 at 3 (November 2006). (Attachment 15). The effects of such a blackout would be severely injurious to public health. Blackouts can cause significant health and environmental impacts, including multiple public health problems that can lead to new or exacerbated injury or death. *Id.* at 108. (Attachment 15). For example, 232 deaths were reported in the Midwest in the summer of 1999 during an extreme heat wave that also included a series of power disturbances. *Id.* (citing Palecki, Michael A., and Stanley A. Changnon, "The Nature and Impacts of the July 1999 Heat Wave in the Midwest", *Midwestern Climate Center, Illinois State Water Survey* (August 23, 1999)). Blackouts also cause increases in fires (due to burning of candles), accidents, and criminal activity. *Id.*

One public health impact particularly relevant to the City of Alexandria is the potential for negative impacts on water caused by blackouts. Blue Plains Wastewater Treatment Plant ("BPWTP") often relies on electricity generated from PRGS. If BPWTP lost power, it would discharge untreated sewage into the Potomac River causing public health and welfare concerns in the Alexandria. *Id.* at 3. Further, drinking water can also be negatively impacted by blackouts. *Id.* at 108. For example, power is needed to power pumps and without pressure in water pipes the system is open to bacteria entering the water supply. *Id.* During an line outage situation in February 2007 when Mirant was required to run to maintain reliable electricity, BPWTP was directly connected to PRGS and the failure of PRGS to provide electricity would have resulted in a loss of electricity to BPWTP.

Moreover, PRGS aids in keeping electricity affordable, not only in Washington D.C. but throughout the region. Higher costs of energy that result from unnecessarily stringent environmental regulations result in a worsening of individual health or safety, and shorten lifetimes. This impact is disproportionately borne by those on low or fixed incomes. This is because those individuals and households must then pay more money for energy and have less money available for health care, food and other essential costs. *See* Klein, Daniel E. and Ralph L. Keeney, "Mortality Reductions from Use of Low-Cost Coal-Fueled Power: An Analytical Framework" (Attachment 16).

The City has also expressed concerns about accumulated SO₂ exposure and has requested SO₂ emissions measured in 5 minute averages. The NAAQS for SO₂ are based on one hour, 24-hour block average and annual SO₂ emissions. After lengthy deliberations EPA has declined to set a NAAQS for SO₂ on a 5 minute basis. Nevertheless, Mirant has agreed to work with the Agency for Toxic Substance and Disease Registry ("ATSDR") to develop a protocol for collecting and analyzing that information. See letter from Laura Green, Cambridge Environmental Inc., to Monica A. Harvey, Department of Environmental Quality, dated May 2, 2007 (Attachment 17).

B. The DEQ Consent Order Imposes New Technology-Based Restrictions.

The DEQ Consent Order would impose short term limitations on PRGS SO₂ emissions of 0.50 lbs/MMBTU on a 30 day rolling average and 0.55 lbs/MMBTU on a 24-hour average. These limitations represent the lowest emission levels that PRGS is capable of consistently achieving and therefore are appropriate as interim limits. Mirant averaged 0.47 lbs/MMBTU last year, a 56 % reduction compared to uncontrolled emissions. Thus, the proposed limits provide only the smallest margin of safety in terms of Mirant's ability to comply with them on continuously. See letter dated March 23, 2007 from Kevin Finto to David Paylor regarding setting emission limitations (Attachment 18).

EPA guidance and various adjudicatory decisions outline the factors that may be used to determine what limits are achievable. An agency uses its technical expertise to determine, on a case-by-case basis, what is achievable. Because limits should be set at a level achievable under all reasonably foreseeable conditions, the EPA Environmental Appeals Board ("EAB") has consistently upheld the incorporation of a safety factor into a permit limitation to ensure consistent compliance. See, e.g., *In re Masonite Corp.*, 5 E.A.D. 551, 560-61 (EAB 1994); *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 53 (EAB 2001). It is for this reason that permit limits are not based on a facility's best day of operation, but rather on the reasonably foreseeable worst day. See, e.g., *In re: Prairie State Generating Co.*, PSD Appeal No. 05-05, 13 EAB ___, 112 (2006) (citing *AES Puerto Rico*, 8 E.A.D. at 349. While not technically permit limits, the DEQ Consent Order includes limitations developed in accordance with this existing guidance and law.

The DEQ Consent Order also calls for a technical optimization study that can be used as a basis for the emission limitations in an operating permit. The study would allow Mirant and DEQ to analyze the facts that influence emission levels, and to more accurately determine emission limitations that are as protective as possible while at the same time being regularly achievable, given the significant constraints on operations at PRGS and allowing the plant to operate economically.

The DEQ Consent Order also imposes requirements for further controls on fugitive particulate emissions from the plant.

C. The DEQ Consent Order Allows for the Stack Merge and the Stack Height Increase.

Two of the projects incorporated into the DEQ Consent Order are the Stack Merge Project and increasing the height of the stacks at the plant. Mirant proposes to merge the emissions from the two⁵ “cycling” or “swing” boilers at PRGS into one stack and to merge the emissions from the remaining three “base load” boilers into another stack. PRGS might also merge the two merged stacks. At the same time, a trona injection system will control SO₂ emissions. The purpose of the “Stack Merge Project” is to increase the velocity of the stack gases, thereby increasing plume rise and reducing the possibility of downwash. There is no question that this is beneficial to air quality and the project should be completed as soon as planned outages allow. The soonest the Stack Merge Project could be accomplished is this fall. But that schedule is contingent on the DEQ/ Board authorizing the project by June 15, 2007 to allow necessary arrangements to be made. If that date is passed without a decision, the project likely will have to wait another year. Mirant sought permission to complete the project last fall and was denied, largely due to opposition from the City of Alexandria, which still opposes the project because it will solve the local air quality problem and reduce the City’s perceived leverage over Mirant. If the Stack Merge Project had been completed last fall, the monitored exceedance of February 23, during a line outage would not have occurred.

The Board, in its notice, specifically requested comment on whether the Stack Merge Project would constitute an unlawful “dispersion technique.” As an initial matter there is nothing “unlawful” about the stack merge. The question the Board may have sought to ask is whether or not the incremental benefits on air quality from the stack merge should be accounted for in modeling used to establishing limits. The Virginia Air Pollution Control Regulations define “dispersion technique” to include combining exhaust gases from several existing stacks into one stack. 9 VAC 5-10-20, “Definition of Dispersion Technique,” Section 1.c. However, the definition excludes the merging of exhaust gas streams where such merging is part of a change in operations that includes the installation of pollution controls and is accompanied by a net reduction in allowable emissions of a pollutant. 9 VAC 5-10-20 Section 2.b. Accordingly, the Stack Merge Project would not be considered a dispersion technique if it is accompanied by a net reduction in the allowable emissions of the pollutant for which the emission limit is being developed. *Id.* And this is exactly the case with respect to sulfur dioxide (“SO₂”), particulate matter (“PM”) hydrogen fluoride (“HF”) and hydrogen chloride (“HCl”) emissions at PRGS.

As noted above, and explained in more detail in Attachments 17 and 18, the Stack Merge Project is only one component of a project Mirant was pursuing to protect NAAQS for SO_x. In conjunction with the Stack Merge Project, Mirant proposed to raise the stacks an additional 50 feet and install and operate a trona injection system to reduce emissions of SO₂ (as well as PM₁₀,

⁵ Mirant believes that no permit is required for the stack merge (*see* letter from Kevin Finto to David Paylor dated February 9, 2007 (Attachment 19) and letter from Robert Driscoll to Terry Darton dated July 21, 2006 (Attachment 20)).

HF and HCl). Permission for the Stack Merge has been delayed, but it is accompanied by the reductions from the trona system. The reductions in emissions from the trona project are significant and are enforceable through the DEQ Consent Order. The resulting emissions of SO₂ are half of the previously uncontrolled rate, and if the DEQ Consent Order is consummated, Mirant would be accepting emission limits that would restrict SO₂ emissions to that lower rate. Accordingly, the Stack Merge Project complies with the exception provided in 9 VAC 5-10-20 (definition of “dispersion technique”) Section 2.b.(2) and Mirant may take credit for its air quality improvements in permit-related modeling. (April 10 Board Meeting Transcript at 27.)

More importantly, because (1) the Stack Merge Project, in combination with the trona injection system, offers the best protection of the NAAQS and 2) DEQ Consent Order is the best manner to ensure that the Stack Merge is completed as soon as possible, that alone is sufficient reason to support the DEQ Consent Order over the City Proposed Order.

Another reason to include the Stack Merge Project in the consent order is that it enables the parties to agree on the manner in which the project will proceed. A permit is not required for the Stack Merge Project. *See* letter dated February 9, 2007 from Kevin Finto to David Paylor regarding Mirant Potomac Generating Station – Stack Merge Project (Attachment 17) and letter from Robert Driscoll to Terry Darton, dated July 21, 2006 (Attachment 18). The project will not change the capacity of any unit, affect the operations, improve the efficiency, or cause any increase in the emissions of any pollutant at the plant. An emissions increase is necessary for a permit to be required. As this project will not increase emissions, Mirant could implement the project on its own. Instead, Mirant is proactively working with DEQ and the City to allow some input into how this project is implemented and voluntarily subjecting (through the proposed DEQ Consent Order) itself to specific emission reductions that must be achieved through this project.

VI. Comments Specific to the City Proposed Order

As an initial matter, while Mirant has already adopted certain provisions of the City Proposed Order as reflected in the DEQ Consent Order, Mirant does not intend to consent to the City’s demands. Accordingly, we are being asked to compare apples to oranges. The City Proposed Order differs from the DEQ Consent Order in several significant ways. First, the City Proposed Order removes the provisions relating to the stack merge project and increasing stack height. The City of Alexandria’s purported reasoning is that they do not want to agree to such projects until Mirant commits to long-term emission limitations. This is putting the cart before the horse. Mirant cannot commit to long-term emission limitations until it has better information about how such limitations can be achieved and that it will be allowed to operate to recoup its investment. The Stack Merge Project and increasing stack height have been demonstrated to decrease air quality impacts — impacts that the City of Alexandria has argued have a direct impact on its citizens. Until those projects are completed, there is insufficient information to determine a definitive long-term emission limitation. Transcript of April 10, 2007 Board meeting at p. 52.

While the City Proposed Order fails to provide for various projects that will reduce air quality impacts, it is at the same time seeking to impose stringent emission limitations in the short term. The City has offered no rational basis for its proposed limits. Moreover, the City has indicated that it will not allow Mirant to make any changes at the plant. The City of Alexandria's position is disingenuous. On the one hand, they want emissions and downwash reduced, but, on the other hand, they are unwilling to allow Mirant to implement projects necessary to improve air quality. The City Proposed Order also fails to recognize that, until those projects are implemented, the more stringent limitations cannot be achieved during times of line outages and air quality action days.

The City Proposed Order also gives lip service to the use of predictive modeling. The DEQ Consent Order uses predictive modeling as a means of determining appropriate operational restrictions. *See* DEQ Consent Order Sections D. 4-7. The City Proposed Order requires predictive modeling, but essentially requires either compliance with stringent emission limitations or during code orange, red or purple days, shut-down of the facility.⁶ Reduced operation or implementation of operational controls does not appear to be acceptable to the City of Alexandria. *See, e.g.*, City Proposed Order at D.3.

The provisions of the City Proposed Order are consistent with the City of Alexandria's acknowledged goal of the shutdown of the Mirant plant and removal of its facilities from Alexandria. *See, e.g.*, Memorandum from Philip Sunderland, City Manager to Mayor and Members of City Council, May 10, 2004 (Attachment 7). *See also Alexandria City Council v. Mirant Potomac River, LLC*, Virginia Supreme Court, Slip Op, (April 20, 2007) (Attachment 10). The Order does not contemplate use of the best performing model to develop long-term emission limits. In fact, it provides no long term planning at all. The emission limitations included in the City Proposed Order are not supported by the data or on plant performance or capability, but rather are based on City of Alexandria's ideas about what is appropriate. The City of Alexandria seeks to impose more stringent requirements than necessary and then prevent Mirant from achieving compliance with those requirements.

Accordingly, Mirant does not support the City Proposed Order.

VII. Conclusion

The DEQ Consent Order protects the NAAQS, imposes interim technology-based limits, solves the concerns raised by the City of Alexandria, and allows DEQ oversight of longer-term projects. Mirant has proffered as a means to further reduce its environmental impact. It also allows sufficient time for development of an effective state operating permit to be developed, all while ensuring reliable power supply in the Washington, D.C. area. Mirant is not operating in violation of any permit or regulations. Nevertheless, Mirant is willing to undertake extraordinary

⁶ These ozone alert days are precisely when electricity is needed most to protect human health. Moreover, they are days of stagnant air, not windy days that give rise to downwash.

Ms. Monica Harvey

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measures to ensure that its emissions do not contribute to such exceedances in the future. Those measures are voluntary in nature, and must be developed in conjunction with a recognition of the other factors that affect Mirant's operations, including specifically, the need to provide a reliable power source to the Washington D.C. area. Moreover, the development of long-term emission limitations for PRGS should be based on reliable data after implementation of various projects that are expected to significantly reduce emissions and reduce the localized effects of such emissions. The DEQ Consent Order addresses all of these considerations, is protective of human health and the environment, and provides an interim path to a long-term solution. Mirant supports the DEQ Consent Order and asks that the Board do the same.

Sincerely,

A handwritten signature in dark ink, appearing to read 'WLS', is positioned above the printed name.

Walter L. Stone

cc: Michael Dowd, Esq.
Attachments

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